

## Claims

What is claimed is:

1           1.       A composite buoyancy unit slidably interposed between support members of a buoyancy  
2       can comprising a plurality of stem side female recesses and exterior surface female recesses, the stem side  
3       female recesses shaped to mate with rings surrounding a stem pipe and the exterior surface female  
4       recesses shaped to accept fasteners used in securing the composite buoyancy unit to the support members.

1           2.       A multi-layer composite buoyancy unit radially slidable between the support members of  
2       a buoyancy can and having outer surfaces engaging the support members in an opposing manner so as to  
3       reduce out-of-plane loading, wherein said buoyancy unit has a plurality of stem side female recesses and  
4       exterior surface female recesses, the stem side female recesses shaped to mate with rings surrounding a  
5       stem pipe and the exterior surface female recesses shaped to accept fasteners used in securing the  
6       composite buoyancy unit to the support members.

1           3.       A buoyancy system for use with a riser comprising at least four buoyancy units made of  
2       multi-layer composite material radially slidable between the support members of a buoyancy can, each  
3       said buoyancy unit comprising a plurality of stem side female recesses and exterior surface female  
4       recesses, the stem side female recesses shaped to mate with rings surrounding a stem pipe and the exterior  
5       surface female recesses shaped to accept fasteners used in securing the composite buoyancy unit to the  
6       support members.